

ABSTRACT

A vaporizer which comprises a vaporization chamber for a CVD material, a CVD material feed portion for supplying the vaporization chamber with the CVD material, a vaporized gas exhaust port and a heating means for heating the vaporization chamber, characterized in that it further comprises an ejection tube of double structure wherein the outer diameter of the outer tube has a portion gradually thinning towards the ejection port to the vaporization chamber. The vaporizer in accordance with the present invention provide, even in the case where decreasing the feed amount of carrier gas supplied by accompanying with the CVD material or increasing the concentration of solid CVD material dissolved in the solvent, a capability of suppressing the separating and adhesion of the solid CVD material near the ejection port to the vaporization chamber. Accordingly, a pressure fluctuation of the vaporized gas or a concentration fluctuation of the CVD material was suppressed and the vaporizing and supplying the CVD material with extreme high vaporizing efficiency and stably for long time, with a desired concentration and a desired flow amount became possible.